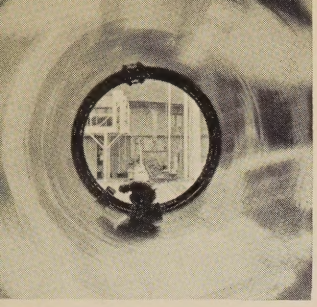
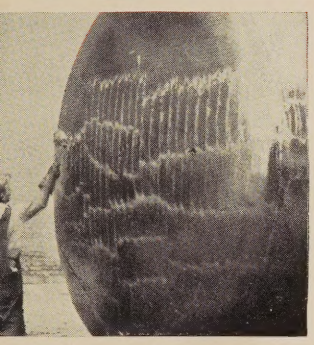
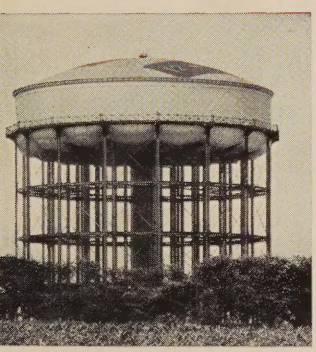
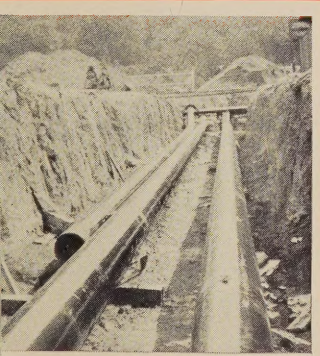
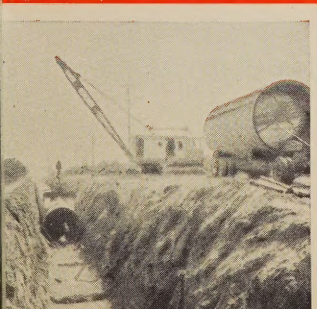










REILLY PROTECTIVE COATINGS

FOR

Every Application

REILLY

- ☆ **PIPE ENAMEL *and* PRIMER**
- ☆ **COLD APPLICATION No. 5**
- ☆ **COLD APPLICATION No. 40**

15 *Reilly* PLANTS TO SERVE YOU

Indianapolis, Ind.	Granite City, Ill.
Chicago, Ill.	Chattanooga, Tenn.
Newark, N. J.	Norfolk, Va.
Minneapolis, Minn.	Fairmont, W. Va.
Cleveland, O.	Mobile, Ala.
Dover, O.	Provo, Utah
Joppa, Ill.	Seattle, Wash.

REILLY TAR & CHEMICAL CORPORATION

Executive Offices: MERCHANTS BANK BLDG., INDIANAPOLIS, IND.

500 Fifth Ave.
NEW YORK CITY

St. Louis Park
MINNEAPOLIS, MINN.

2513 S. Damen Ave.
CHICAGO

Architects Bldg.
LOS ANGELES, CALIF.

Reilly PROTECTIVE COATINGS

CORROSION is always a problem in steel construction. It matters not whether the construction be a water tank, water conduit, oil or gas transportation line, or sewer line, corrosion will be present in one form or another. Any steel used in such construction must be protected if a service life commensurate with its cost is to be obtained.

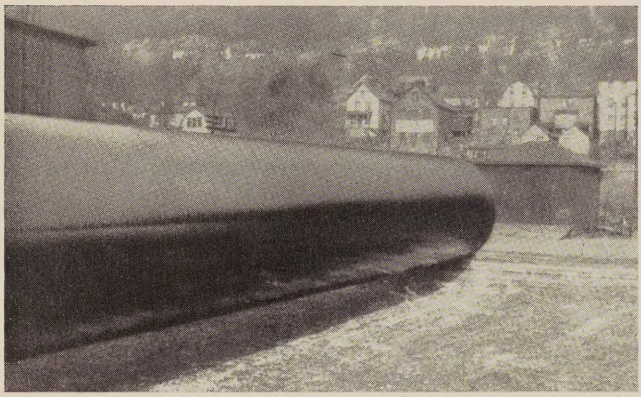
OIL AND GAS TRANSPORTATION LINES . . . .

Oil and gas transportation lines require protection against corrosion due to moisture, localized electrolytic action and corrosion due to acidic or basic soils through which the lines are run. The coal tar enamel coating used on such lines must prevent all moisture from coming in contact with the pipe. The coating must be hard enough to resist abrasion, and the bond between the enamel and the pipe must be such that the coating will not be affected by soil stress. Such coatings must be able to withstand temperatures as low as minus 20°F. without cracking or checking and temperatures as high as 160° to 170°F. without flow or sag. REILLY Enamel is a coating meeting these requirements in every respect.

WATERWORKS and SEWERAGE

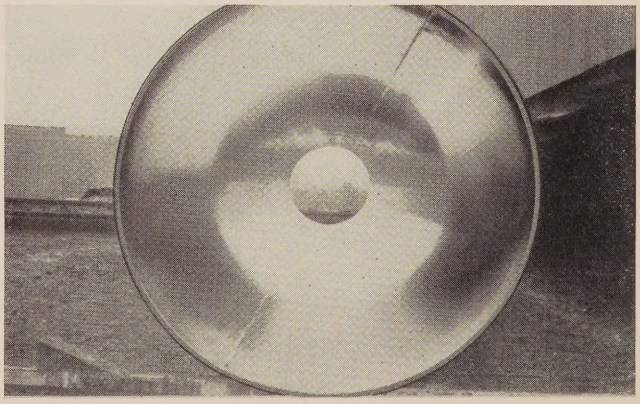
Water conduits and sewerage lines are subjected to the same type of corrosion as oil transportation lines on both the inside and outside of the pipe, and in addition are subjected to incrustation and tuberculation. Sewerage lines may in addition be affected by corrosive

gases and industrial wastes which are corrosive. Incrustations in water conduits are very objectionable, not only from the standpoint of corrosion but because the incrustations and tuberculation grow, gradually decreasing the flow capacity of the line, so that after a few years of service, lines carrying incrustating or tuberculating waters will deliver only a fraction of their original capacity. Cast Iron water lines, although not much affected by corrosion, are subject to decreased flow due to incrustation and tuberculation. Steel water tanks must have a protective coating to prevent corrosion.



Outside coating with Reilly Enamel for Colorado project.

Welded pipe lined with Reilly Enamel for Colorado project.



Reilly ENAMEL and PRIMER

REILLY Enamel and Primer offer the finest protective coating obtainable for coating oil and gas transportation lines—coating and lining water conduits and sewerage lines, lining of water tanks and coating of steel tanks placed in the ground. Not only does REILLY Enamel offer complete protection on these installations but may also be used for the protection of tanks against dilute acids and alkalies.

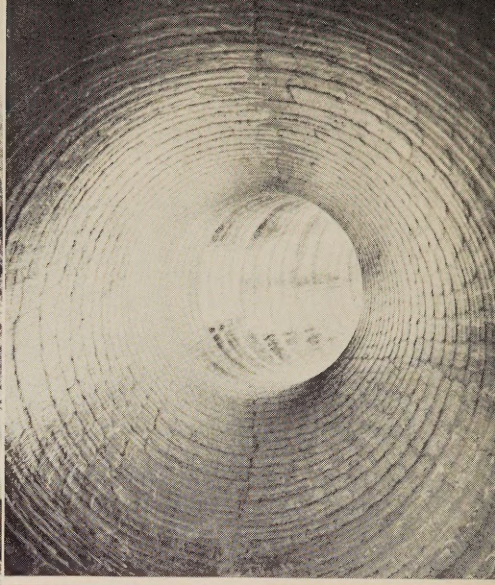
REILLY Enamel and Primer are made of an all coal tar base and contain no asphalt, either petroleum or natural. When applied to metal surfaces the enamel gives a continuous protective coating free from pinholes and holidays, exhibiting a bright, smooth surface.

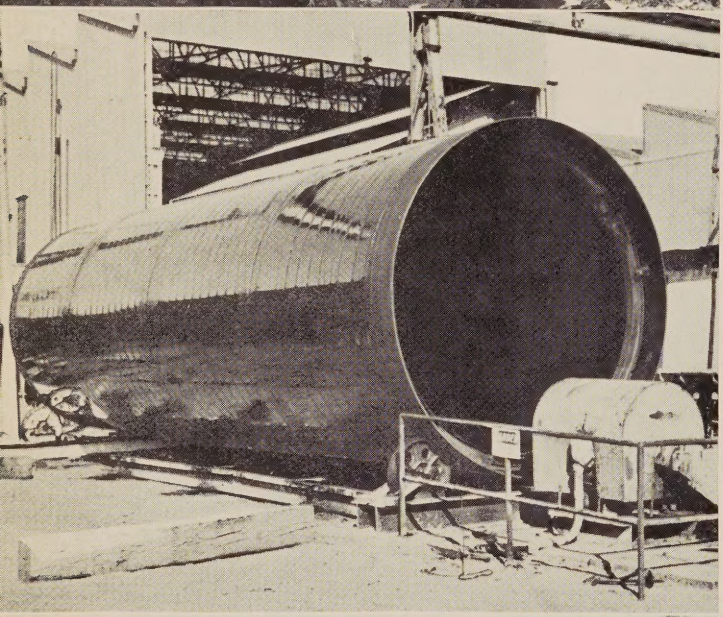
APPLICATION PROCEDURE

REILLY Enamel is readily applied at the mill or in the field using either hand daubing, centrifugal spinning or other machine methods. The surface to be coated should be perfectly clean and bright and any method of cleaning which accomplishes this result may be used. Pickling and sand or grit blasting are the methods usually preferred.

The surface to be coated must be absolutely dry at the time of coating and neither Primer nor Enamel shall be applied during rain or fog. The Primer is applied by brushing or spraying, (at temperatures not under 50°F.). The priming coat shall be applied evenly and shall be free of runs or festoons. Only one coat of Primer shall be used, except when it is impossible to apply the Enamel within the specified time, in which case a second coat should be used. The coverage of Primer is approximately 800 square feet per gallon per coat.

The Enamel shall be heated in kettles of approved design, equipped with accurate and easily read thermometers. Care should be taken that the heating is not





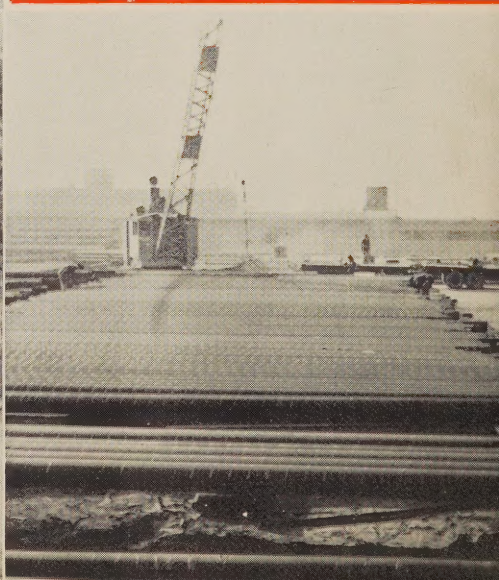
REILLY PROTE
for EVERY

Above: Hand coated penstock for Iron Moun-
tain pumping plant No. 4, Metropoli-
tan Water District, California.

At left—top to bottom:

1. Oil transportation line being coated with REILLY Enamel.
2. Outside coating for 10′ 6″ steel pipe being applied at mill.
3. Section of pipe, coated and lined with REILLY Enamel, ready to be laid. (Colorado River Aqueduct Metropolitan Water District.

Below: A day's run from the coating machine



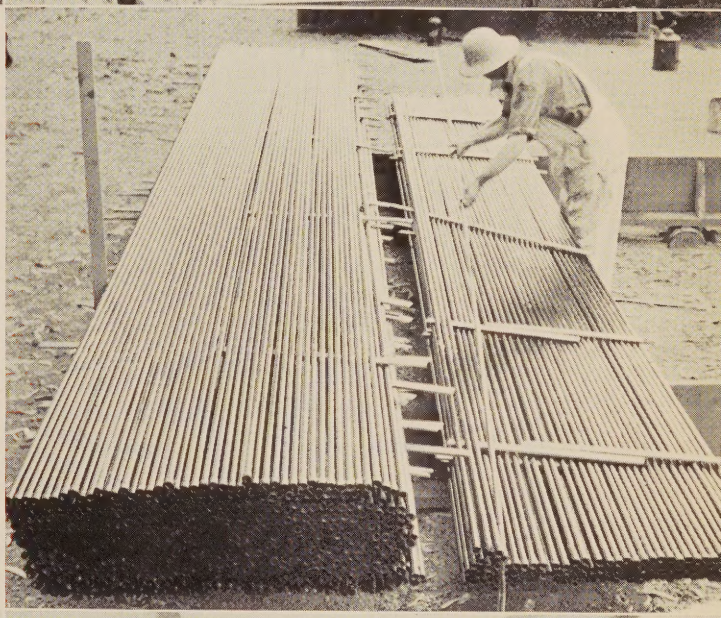
TIVE COATINGS
APPLICATION

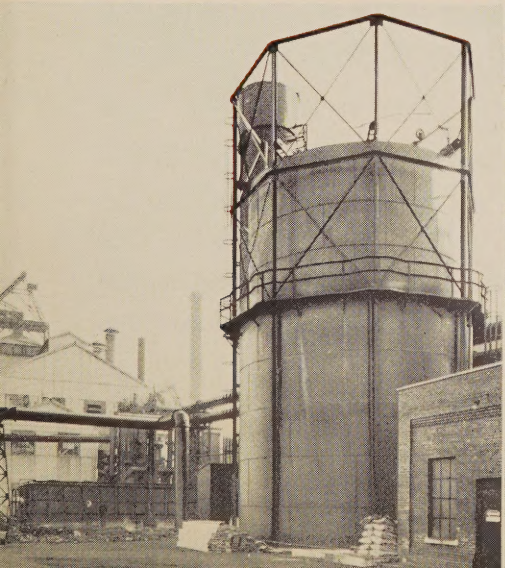
Above: Electrical testing for pin holes and voids in enamel coating.

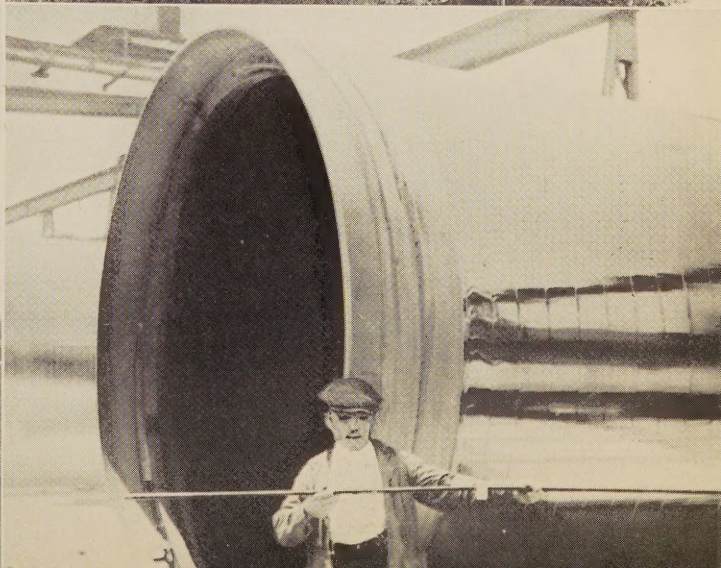
At right—top to bottom:

1. 63″ water conduit, coated and lined with REILLY Enamel, Denver, Colo.
2. Coating small size pipe for transporting oil.
3. REILLY protective coatings are adapted for use on pipes of any size, from small gas pipe to largest water conduit.

Below: Structural steel work and tank coated with REILLY CA No. 40.







carried out too rapidly. Temperatures near the heated surfaces of the kettle should never exceed the temperature of the main body of Enamel by more than 25°F. The Enamel shall be applied at 450° to 470°F. It shall not normally be heated above 475°F., and in no case shall its temperature exceed 500°F. Heating kettles shall be kept covered during the heating period. They shall be emptied and cleaned each day. To secure optimum smoothness of surface, the Enamel should be heated to 475°F. and the heating stopped. The Enamel should then be stirred and allowed to cool to application temperature.

The Enamel shall be applied not less than six nor more than seventy-two hours after the priming coat has been applied, and the thickness shall be within a tolerance of 1/32 inch of the specified thickness. Care shall be taken to secure as smooth a coating as possible, consistent with the method of application.

REILLY Primer and Enamel give a bond between steel and coating that cannot be chipped with a hand or power chisel without leaving particles of the coating adhering to the metal, and it is impossible to strip or pry the enamel from the metal at a temperature of 160°F.

After the coating has been applied to steel pipe, extreme care shall be taken in transporting and laying the pipe to prevent injury to the coating, and any injury shall be repaired by thoroughly removing the broken coating, priming and recoating in accordance with the instructions previously given.

REILLY PRIMER—for use with REILLY Enamel is of sprayable consistency at 77°F. under a sprayer pressure of fifty pounds per square inch. It gives a pliable adherent coating covering an average of 800 square feet per gallon. The primer gives a bond between the metal and the enamel of unequalled performance.

REILLY ENAMEL No. 230-A, No. 230-H

REILLY Enamel is manufactured in two standard grades or to meet special requirements. Both standard grades (No. 230-A and No. 230-H) are designed to meet standard installation and service conditions in different localities. Both are applied by the same procedure.

Enamels No. 230-A and No. 230-H exhibit the following characteristics:

	No. 230-A		No. 230-H	
	Min.	*Max.*	*Min.*	*Max.*
Softening Point °F. (A. S. T. M. D36-26)	210		220	250
Penetration—A. S. T. M. D-5-25				
32°F. 200 g. 60 sec.	1	4	0	2
77°F. 100 g. 5 sec.	4	9	1	5
115°F. 50 g. 5 sec.	6	20	7	12
Ash (Mineral Filler) Percent by wt.	25	35	28	38
Fineness of Filler Percent through 200 mesh	80		80	
Specific Gravity 77°.	1.45	1.55	1.48	1.56
Sag or Flow at high temperatures	None at 170°F.		None at 170°F.	
Stripping at high temperatures	None at 160°F.		None at 160°F.	
Cracking and chipping from exposure at low temperatures	None at minus 20°F.		None at 0°F.	

Complete specifications and test data of the above or any other desired grades of Enamel are available on request.

COLD APPLICATION COATING No. 5 (CA No. 5)

Related to REILLY Enamel but designed for application without heating is REILLY Cold Application Coating No. 5, a coating of unusual properties. In the container the material exhibits a thick pastelike appearance which on stirring becomes more liquid and is of a brushing consistency at normal temperatures. It is adapted for use on metal, tile, stone and concrete surfaces where such surfaces are to be placed under water or under ground. It is an excellent waterproofing agent for most construction and is exactly suited for waterproofing of concrete. In concrete sewer construction this coating prevents attack on the concrete by dilute acids, alkalies and corrosive gases which are exceptionally corrosive at the water line.

CA No. 5 is applied cold to clean metal or concrete surfaces by brushing and a single brush application will flatten to a smooth surface giving a coating 1/32 inch

thick. (Visible brush marks are allowable). The smooth flexible coating dries to touch in six hours when the coating is applied and maintained at normal temperatures in a ventilated place. The dried coating adheres tenaciously to the surface on which it is applied and will not check, crack or peel on exposure to temperatures as low as minus 30°F. and will not flow or sag during or after drying even at a temperature of 160°F.

STEEL CONSTRUCTION COLD APPLICATION COATING—(CA) No. 40

Steel construction in general around the oil refinery, pumping station, water plant, sewerage plant or manufacturing plant is subject to corrosion from contact with the atmosphere and corrosive gases. REILLY Cold Application Coating CA No. 40 was developed for the purpose of producing a durable black paint which would adhere firmly to metal surfaces. CA No. 40 will not disintegrate and gives thorough and complete protection.

CA No. 40 is a liquid at normal temperatures. It is of sprayable consistency, or it may be applied by brushing. The surfaces to which it is applied must be clean, dry and free from all rust, scale or other incrustating materials. The coverage obtained is approximately 200 sq. ft. per gallon, and the painted surface will dry to touch within one hour and will dry thoroughly in twenty-four hours. CA No. 40 presents a hard but pliable surface, and when properly applied will not crack, check or peel. It will withstand wide temperature variations and is extremely resistant to moisture, corrosive vapors and abrasion.

CA No. 40 is recommended for structural steel work, tanks, steel buildings, stacks, and for any application where steel is exposed. CA No. 40 also makes an excellent base on which to apply aluminum paints.

SERVICE

The REILLY Tar & Chemical Corporation maintains a service department to cooperate with engineers, contractors and pipe fabricators on their coating problems, and trained field men are available to assist users of REILLY protective coatings. Whatever your coating problem may be we invite your inquiries and assure you that your requirements will have our prompt and individual attention.

ACIDS

CRESYLIC ACID
HIGH BOILING TAR ACIDS
HIGH BOILING XYLENOLS
LOW BOILING XYLENOLS
META PARA CRESOL
ORTHO CRESOL
PHENOL
SYMMETRICAL XYLENOLS
TAR ACID OILS (All Grades)
TECHNICAL CRESOL
U. S. P. CRESOL
U. S. P. PHENOL

CHEMICALS

ACENAPHTHENE
ANTHRACENE
CARBAZOLE
DIMETHYLNAPHTHALENE
FLUORENE
METHYLNAPTHALENE
RE-NAP NAPHTHALENE
PHENANTHRENE

CREOSOTE OILS
(ALL SPECIFICATIONS)

A. R. E. A. CREOSOTE OIL
A. W. P. A. CREOSOTE OIL
ANTHRACENE OIL
BRUSHING OIL
CHINCH BUG OIL
DEAD OIL
REILLY WOOD PRESERVING OIL

Reilly
COAL TAR PRODUCTS

COAL TAR OILS

LIGHT OILS
NEUTRAL OIL
TAR ACID OILS (All Grades)
LAMP BLACK OIL
INSECTICIDE OIL
DORMANT SPRAY OIL
DISINFECTING OIL
BINDER TWINE OIL
SPECIAL DISTILLATES

TAR

COAL TAR
COKE OVEN TAR
FISH NET TAR
PIPE DIP TAR
REFINED COAL TAR
SATURATING TAR
WATER GAS TAR

SPECIAL PRODUCTS

CARBON COKE
COAL TAR PAINTS
FLOTATION OILS
FLOTATION REAGENTS
PICKLING INHIBITORS
PIPE COATING
REILLY CARBON
REILLY TRANSPARENT
PENETRATING CREOSOTE
ROOFING FELT, PITCH AND TAR
TRAFFIC MARKING PAINT
BITUVIA ROAD TAR

INDUR PLASTICS
(TO SPECIFICATION)

INSULATING VARNISH
LAMINATING VARNISH
MOLDING POWDER
MOLDING RESIN

PITCH

BATTERY PITCH
BRIQUETTING PITCH
COAL TAR PITCH
CORE PITCH
FUEL PITCH
PAVING PITCH
PITCH COKE
ROOFING PITCH

REILLY TAR & CHEMICAL CORPORATION

Executive Offices: Merchants Bank Building, Indianapolis, Indiana

2513 SO. DAMEN AVENUE, CHICAGO, ILLINOIS 500 FIFTH AVENUE, NEW YORK, N. Y. ST. LOUIS PARK, MINNEAPOLIS, MINN.

FIFTEEN PLANTS TO SERVE YOU

Reilly
COAL TAR
PRODUCTS